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How birds weather the weather: avian migration in the mid-latitudes

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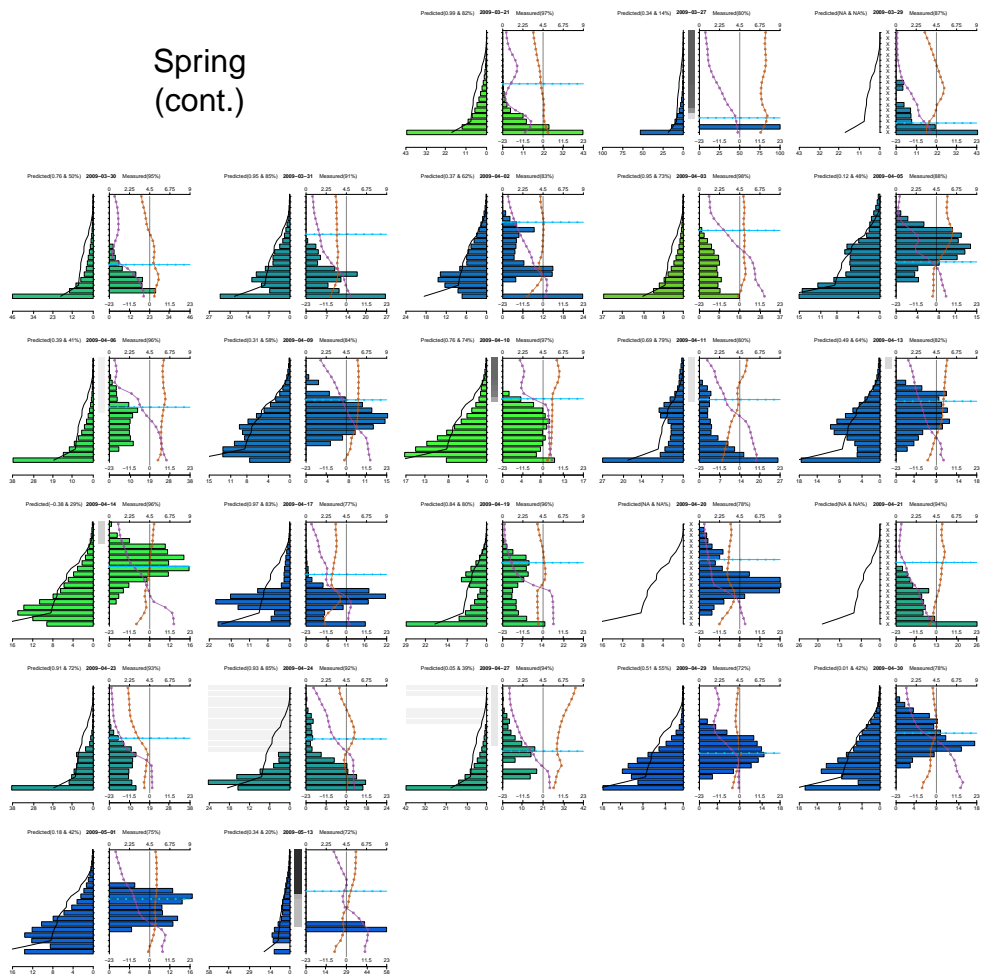
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Appendix E: Results of GAM model predicting avian altitude distributions

Measured nightly altitude distributions of pBd , Tw , SH , Cp , and T (only the freezing point) along with associated altitude distributions of pBd predicted by our final GAM models for spring and autumn are shown for altitudes between 0.2 and 4 km in bins of 200 m. On the right of each pair are measured distributions of pBd . Altitude distributions of Tw (orange line; ms^{-1}) and RH (purple line; %) are shown superimposed on top of the measured pBd distributions along with a light blue horizontal line at the altitude at which freezing temperatures occurred. The range of Tw and RH values are indicated along the top of the lower x-axis and along the upper x-axis, respectively, and a vertical gray line indicates the transition point from negative to positive Tw values. Predicted distributions of pBd are shown on the left, with a black line indicating the weighted average distribution of pBd for that season. The color of the measured and predicted distributions of pBd indicates the measured intensity of migration on a given night from blue (least intense) through green to red (most intense). In between the predicted and measured distributions of pBd is a graphical representation of the value of Cp (%) for each altitude bin, with white indicating no Cp and black indicating 100% Cp . Altitude bins in the predicted distribution shown in transparent gray do not have a predicted value due to missing predictor variables, and missing values of Cp are indicated by an 'X'. The numeric value given in parentheses next to the label "Measured" indicates the percentage of nights from that season with less-intense migration. The first value next to the label "Predicted" indicates the Spearman's ρ correlation between the measured and predicted distributions of pBd and the second value indicates the proportion of variability in the measured distribution of

pBd explained by the predicted distribution of *pBd*. The title of each plot indicates the night (at sunset) during which the conditions were measured. Note that Appendix E is not available in the print version of this thesis; however, it is available in its entirety at <http://dare.uva.nl/record/421932>.

Spring
(cont.)

Autumn

