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### Data S1

### Data and code to reproduce best practice analysis and forecastability comparison

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### File list

Literature review summary.Rmd

Matrix analysis.Rmd

R2 analysis.Rmd

**Description**

Literature review summary.Rmd – Code used to analyze literature review data and create Venn diagrams for Fig. 1.

Matrix analysis.Rmd – Code used to process matrix analysis results and create five figures: (1) the number of near-term ecological forecasts published per year, (2) a general description of ecological forecasting papers identified in this study, (3) the relationship between time step and forecast horizon of forecasting papers, (4) the total number of years of data used to develop each forecasting paper, (5) best practice adoption over time. Perform relevant calculations for matrix analysis results.

R2 analysis.Rmd – Code used to process R2 data, create a figure showing forecast performance (R2) over increasing forecast horizons for chlorophyll, phytoplankton, pollen, and evapotranspiration, and conduct a logistic regression to determine how R2 changes with forecast horizon for these variables. File also includes code for basic summary statistics related to R2