

Relative Impacts of Climate and Land-use Change on North American on U.S. Bird Species

Species Data

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ZIP files for each of the 50 modeled species contain 18 files, providing out data and range maps from Maxent model runs. Three types of files are included:

.img files – All files ending with the .img extension are ERDAS image files (.img format). Each represents spatially explicit Maxent model output (maps) of the conterminous United States for a given model run. Pixel values represent modeled “presence scores”, with higher values representing increased suitability to support a given species. Note original Maxent output are floating point files with values from 0 to 1. All files here have been rescaled to 8-bit (0 – 255 values) to decrease file size.

.pdf files – All files ending with .pdf extension are Adobe Portable Document Format (PDF) files describing model output for a given model run. Maxent produces .html files describing the results of a given model run. The PDF files represent conversions of the Maxent .html files to a more easily distributed format. These files contain information on model fit, a suite of potential presence/absence thresholds, response curves for each model covariate, relative contribution of each model covariate to model output, and other results specific to a given model run.

.lambdas files – All files ending with .lambdas extension are Maxent files that define the parameters of a given model run. Each .lambdas file contains the covariate features, corresponding coefficients, and other Maxent model parameters derived from a given model run. The .lambdas files can also be directly ingested into Maxent and used to run the developed model, provided raster image files representing each of the covariates are available.

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The following describes what each of the 18 files represent, with “XXXX” representing an individual species’ name:

- 1) **XXXX_2001_All_Variables.img** – ERDAS .img file providing model output (map) representing the 2001 model run with all variables modeled (climate, LULC, and topography).
- 2) **XXXX_2001_All_Variables.lambdas** – Maxent .lambdas file representing the 2001 model run with all variables modeled (climate, LULC, and topography).
- 3) **XXXX_2001_All_Variables.pdf** – Adobe PDF file describing results of the 2001 model run with all variables modeled (climate, LULC, and topography).
- 4) **XXXX_2001_No_Climate.img** – ERDAS .img file providing model output (map) representing the 2001 model run with LULC and topography as covariates (no climate data).
- 5) **XXXX_2001_No_Climate.lambdas** – Maxent .lambdas file representing the 2001 model run with LULC and topography as covariates (no climate data).

- 6) **XXXX_2001_No_Cliamte.pdf** – Adobe PDF file describing results of the 2001 model run with LULC and topography as covariates (no climate data).
- 7) **XXXX_2001_No_LULC.img** – ERDAS .img file providing model output (map) representing the 2001 model run with climate and topography as covariates (no LULC data).
- 8) **XXXX_2001_No_LULC.lambdas** – Maxent .lambdas file representing the 2001 model run with climate and topography as covariates (no LULC data).
- 9) **XXXX_2001_No_LULC.pdf** – Adobe PDF file describing results of the 2001 model run with climate and topography as covariates (no LULC data).

- 10) **XXXX_a1b_2075_All_Variables.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A1B scenario, using projected (2075) climate data and projected (2075) LULC data.
- 11) **XXXX_a1b_2075_Static_Climate.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A1B scenario, using projected (2075) LULC data, but static (2001) climate data.
- 12) **XXXX_a1b_2075_Static_LULC.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A1B scenario, using projected (2075) climate data, but static (2001) LULC data.

- 13) **XXXX_a2_2075_All_Variables.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A2 scenario, using projected (2075) climate data and projected (2075) LULC data.
- 14) **XXXX_a2_2075_Static_Climate.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A2 scenario, using projected (2075) LULC data, but static (2001) climate data.
- 15) **XXXX_a2_2075_Static_LULC.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the A2 scenario, using projected (2075) climate data, but static (2001) LULC data.

- 16) **XXXX_b1_2075_All_Variables.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the B1 scenario, using projected (2075) climate data and projected (2075) LULC data.
- 17) **XXXX_b1_2075_Static_Climate.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the B1 scenario, using projected (2075) LULC data, but static (2001) climate data.
- 18) **XXXX_b1_2075_Static_LULC.img** – ERDAS .img file providing model output (map) representing the 2075 model run for the B1 scenario, using projected (2075) climate data, but static (2001) LULC data.