**Replication files for “Ensemble Forecasting of Irregular Leadership Changes”**

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To replicate the figures and tables in the article:

1. Download or cline the replication folder from github: <https://github.com/andybega/rap-ensemble-forecasting>
2. Download the 3 data files from dataverse and place them in replication/data: <http://dx.doi.org/10.7910/DVN/27482>.
3. Change the working directory in runme.R to the path for the replication folder, then source or run through runme.R.

The replication script will attempt to install two required R packages that are include and not available on CRAN. You may have to manually install them if this fails. They are included in replication/R/packages as EBMAforecastbeta\_0.44 and spduration\_0.12, with versions for Windows (.zip) and OS X (.tar.gz).

Files included in the replication folder:

runme.R – Replication R script to recreate figures and tables. Depends on the contents of the R and data subdirectories.

/R

ensemble\_forecast.R – Defines several helper functions for calculating ensemble forecasts.

worldMap.R – Defines a generic function for thematic maps of the world.

/R/packages

EBMAforecastbeta\_0.44.tar.gz – OS X source package

EBMAforecastbeta\_0.44.zip – Windows source package

spduration\_0.12.tar.gz – OS X source package

spduration\_0.12.zip – Windows source package

/data

readme.md – Markdown file listing the included R data files.

irc\_data\_v3.dta – R data file that contains raw replication data. Two objects, base.data going back to 1955 and irc.data back to 2001.

irc\_data\_mod.dta – R data file that contains imputed and cleaned replication data. Three objects: train is data to estimate thematic models, test contains calibration and out of sample test data, irc.data is complete, unpartitioned data set.

model\_estimates.rda – R data file with 7 objects that contain the thematic model estimates.

ensemble\_data.rda – R data file of the thematic model predictions that are used to calibrate ensemble.

ensemble.rda – R data file of the estimated ensemble object.