## 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.

 ${\tt model\_estimates.rda}$  - 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.