3 Supplementary Material S3

#Split occurrence data in two groups

#This is not a detailed explanation but just an example of the process employed to generate two independent sets of occurrences for calibration and evaluation.

setwd("C:/folder_name")# set working directory with the occurrences and environmental rasters.

Install the R package ENMeval and the complemetary libraries (e.g. dismo, raster, rgdal).

library(ENMeval)#upload ENMeval.

occ<-read.table("occurrences_original.csv", head=T, sep=",")#upload the occurrences file in Maxent format (i.e., three columns: species, longitude, latitude).

occ<-occ[,c(2,3)]#Use information in columns 2 and 3.</pre>

env<-raster("Bio1.tif")#Upload one of the rasters that will be used for model calibration.

plot(env)#Display the raster

points(occ)#display the occurrences

#Split of occurrences

bg<-as.data.frame(env, xy=T)#Set the occurrences as data frame.</pre>

block_df<-get.block (occ, bg)#Split occurrences in block (see Muscarella
et al. 2013. Ecography)</pre>

occ\$group<-block_df\$occ.grp#Asign occurrences into four groups (1, 2, 3, and 4).

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#Display occurrences by group.
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```
plot(occ$DecimalLongitude, occ$DecimalLatitude, pch=".",
col=rainbow(7)[occ$group])
```

cal<-occ[which(occ\$group %in% c(1,4)),]#Calibration occurrences from groups 1 and 4, i.e., off diagonal.

```
evl<-occ[which(occ$group %in% c(2,3)),]#Evaluation occurrences from groups
2 and 3, i.e., off diagonal.</pre>
```

#Save one group of occurrences as cal.csv

write.table(cal, "cal.csv", row.names = F, sep=",")#Save Calibration
occurences as .csv file.

#Save one group of occurrences as evl.csv

write.table(evl, "evl.csv", row.names = F, sep=",")#Save Calibration
occurences as .csv file.