**Test Summary**

This test is to check that the output of the Artificial Neural Network (ann) projection experiment is accurate.

**Preconditions & Test Data-sets Required**

occur.csv

bkgd.csv

future climate layers (RCP3PD\_cccma-cgcm31\_2055 | bioclim01-bioclim19.tif)

model.object.RData (produced by “ann Model Evaluate.docx” test script)

**Test Steps**

1. Log in to the BCCVL
2. Select Experiments tab
3. Click new Projection Experiment
4. Enter “Phascolarctos cinereus ann projection” as the name for this experiment.
5. Enter “Phascolarctos cinereus ann projection RCP3PD\_cccma-cgcm31\_2055” as the description of experiment
6. Click Next
7. Select distribution model “Phascolarctos cinereus ann model and evaluation” under Species Distribution Models
8. Click Next
9. Select 2055 for Years
10. Select RCP 3PD for Emission Scenarios
11. Select cccma-cgcm31 for Climate Models
12. Click Next
13. Click start Experiment

**Expected output in files:**

1. future.tif – ann model projected onto future climate layers
2. future\_ClampingMask.tif – ann model projected onto future climate layers with a clamping mask applied. This mask identifies locations where predictions are uncertain because the values of the variables are outside the range used for calibrating the models.

**Comments**

Test Step #7 I’m not sure what this is going to be called, I’m assuming same as the name of experiment which created the model

EMG Even though outputs are created, there were warning messages received during model projection that may cause wonky results. I still need to troubleshoot ☺

Warning messages:

In predict.lm(object, newdata, se.fit, scale = 1, type = ifelse(type == :

prediction from a rank-deficient fit may be misleading