

# Analysis of relative air humidity in Brasília - DF: an application of variable order chains

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**Abstract.** Following Quintino and Moreira (2015), the initial motivation of this work was to obtain meteorological models in the Federal District. More specifically, we propose models of prediction for the minimum relative humidity of air for Brasília-DF. For this, the class of models used were the variable order chains. We use daily minimum relative air humidity data to calculate the probability that a state of emergency, alertness, attention state, or adequate humidity for health will occur on a given day. The estimation of the trees of contexts associated to the proposed models was done through the BIC estimator in the R environment. In addition, we verified that there was a change in the relative air unit of Brasilia after 2000 years when compared to previous years.

## References

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