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Olga Alekseevna Rumyantseva* (olga.rumyantseva@wsu.edu), 14204 NE Salmon Creek Ave, Vancouver, WA 98686, and **Nikolay S Strigul**. *Data-intensive modeling of Pitch Pine range in North America*.

Climate envelop models are traditionally employed in predicting species ranges. In this work we develop a generalized multidimensional climate envelop model of Pitch Pine (*Pinus Rigida*) distribution in the contiguous United States. The proposed data-intensive methodology bridges information extracted by data-mining of US Forest Inventories (FIA dataset) and climatic datasets (19 climatic characteristics on the 1 km^2 grid). This novel approach allowed us to study how every single climatic variable affect Pitch Pine distribution, and to evaluate whether interactions between climatic factors are important for this species. In particular, we ranked 19 climatic factors in order of their relative effects on the species range and isolated 5 most important factors. Finally we demonstrated that the interaction between factors is essential for understanding of Pitch Pine distribution and should not be ignored in the development of climate envelop species range models. (Received February 28, 2017)