PASCC
Research in Progress FY19

ASSESSING PROLIFERATION RISK: USING ADVANCED DATA ANALYTICS TO EVALUATE EMERGING NUCLEAR THREATS

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FY19

ABSTRACT:

A recent renaissance in studies of nuclear proliferation—and particularly in the availability of data on nuclear energy and weapons programs—offers new opportunities to evaluate the risk that particular countries will seek nuclear weapons. This project applies advanced data analytics to derive a proliferation risk score: a systematic way to categorize states by the risk that they will develop nuclear weapons under particular circumstances. The project team will further develop several key datasets, leverage predictive analytic techniques from computer science and statistics to forecast the risk of proliferation under particular circumstances, and conduct several case studies to validate the results of the model. The project will result in a policy paper and presentation that will highlight the implications of proliferation risk scores for the nuclear analytic community. Ultimately, this work benefits the public by improving the ability of analysts and decision-makers to counter proliferation threats.

Research in Progress describes ongoing PASCC research. For more information please contact INSS@usafa.edu.