1154-J1-2091   **Julianna Bernardi** (`bernardij1@wit.edu`), **Vincent Filardi*** (`vincent.filardi@gmail.com`), **Malorie Finch** (`malorief1@gmail.com`), **Tanvi Shinkre** (`tanvi.shinkre@berkeley.edu`) and **Jeffrey Zhang** (`jzhan154@jhu.edu`). *General Electric Aviation Material Wear Data Analysis.*

The quality control of hundreds of thousands of airplane engines flying around the globe depends on our understanding of the material wear variability in the various engine components. Herein we use data projection techniques and supervised learning algorithms on a GE Aviation dataset to predict material wear on critical engine parts and to determine the key factors that influence wear. Such a model would allow engine designers, material scientists, and GE Aviation to continue to set the standards and design airplane engines to reduce material wear and produce longer-lasting engines. (Received September 17, 2019)

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