An Automated Process for Credibility Assessment

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ABSTRACT: NASA’s Modeling and Simulation Standard requires a credibility assessment for critical models and simulations. Accordingly, the NASA Constellation Project has synthesized a tailored list of criteria for assessing modeling and simulation credibility by leveraging and enhancing the more traditional verification, validation, and accreditation criteria used in DOD, DOE, industry, academia, and international modeling and simulation programs. This paper introduces a process and an accompanying Excel Spreadsheet tool that uses a modified version of the Analytical Hierarchy Process to apply this credibility criteria to all varieties and situations of modeling and simulation application across the Constellation Project. Both the process and the enabling tool are intended for open source participation and use.