CFD FOR MISSION COMPUTING

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Flow simulation tools and computing hardware have been developed to the point that anyone interested in flow simulation has access to high-speed computers and CFD codes, either in-house or commercially developed. Depending on the nature of solutions desired, the maturity level of the current CFD technology can vary. In the present talk, the status of CFD will be discussed from a mission computing point of view. Examples from space exploration support and development will be used to illustrate the capabilities and challenges of present modeling and simulation technology.