MULTI-OBJECTIVE ASSESSMENT OF BLAST DAMAGE

Toshihiro Tsuga[1], Rainald Löhner[1], Fumiya Togashi[2]

[1] *CFD Center, Dept. of Computational and Data Science, M.S. 6A2, College of Science, George Mason University, Fairfax, VA 22030-4444, USA*
[2] *Advanced Technology Group, SAIC, McLean, VA, USA*

ABSTRACT

Multi-objective genetic algorithms (MOGAs), surrogate models and Kriging techniques are combined in order to assess worst-case scenarios for blast damage. The flowfields ensuing from blasts are computed using a 3-D Euler solver. Results indicate that even though CPU requirements are not trivial, the insight gained is considerable and well worth the effort.