# UNIVERSITY OF Southampton

Engineering and the Environment

Aeronautics, Astronautics and Computational Engineering
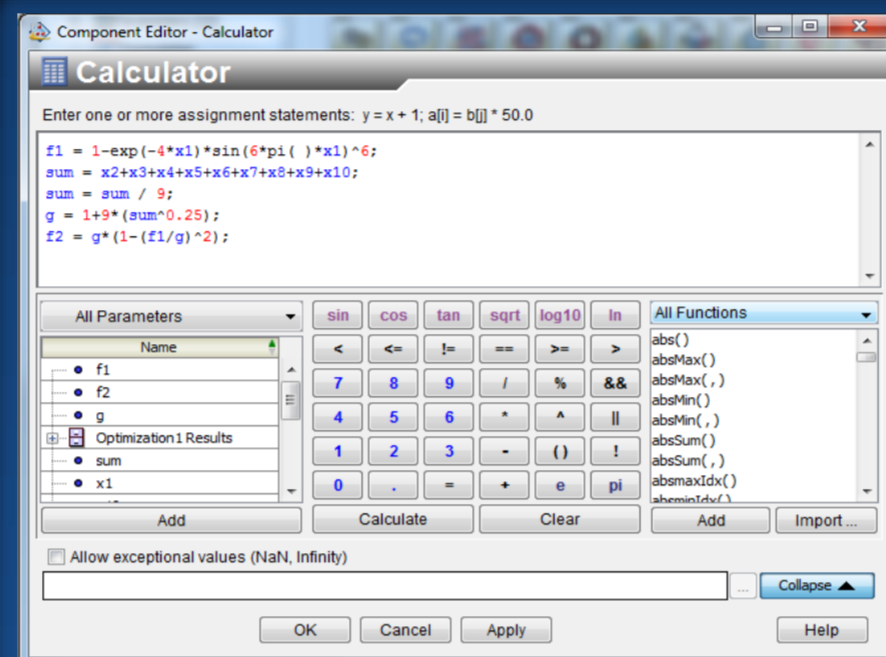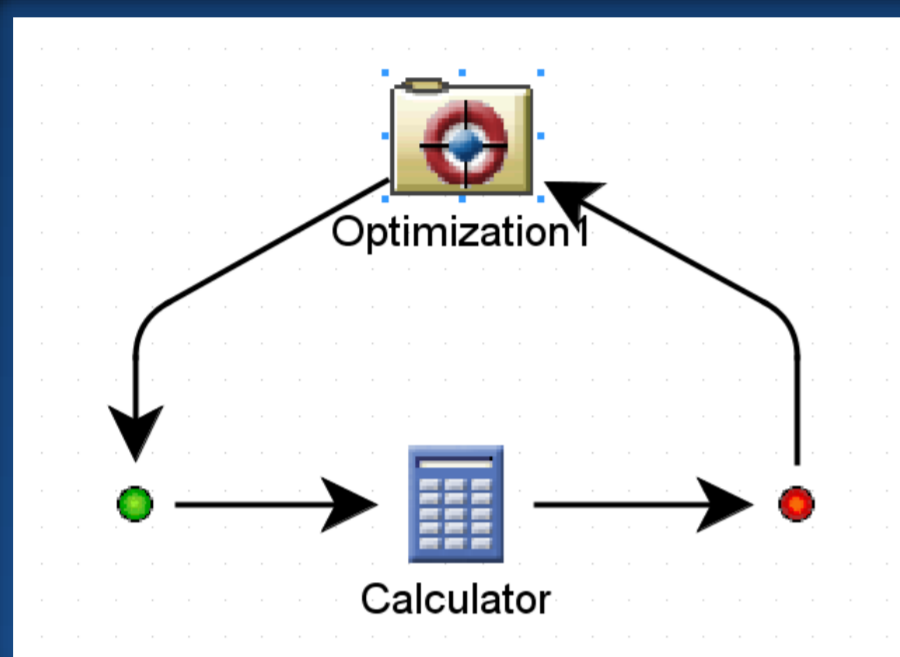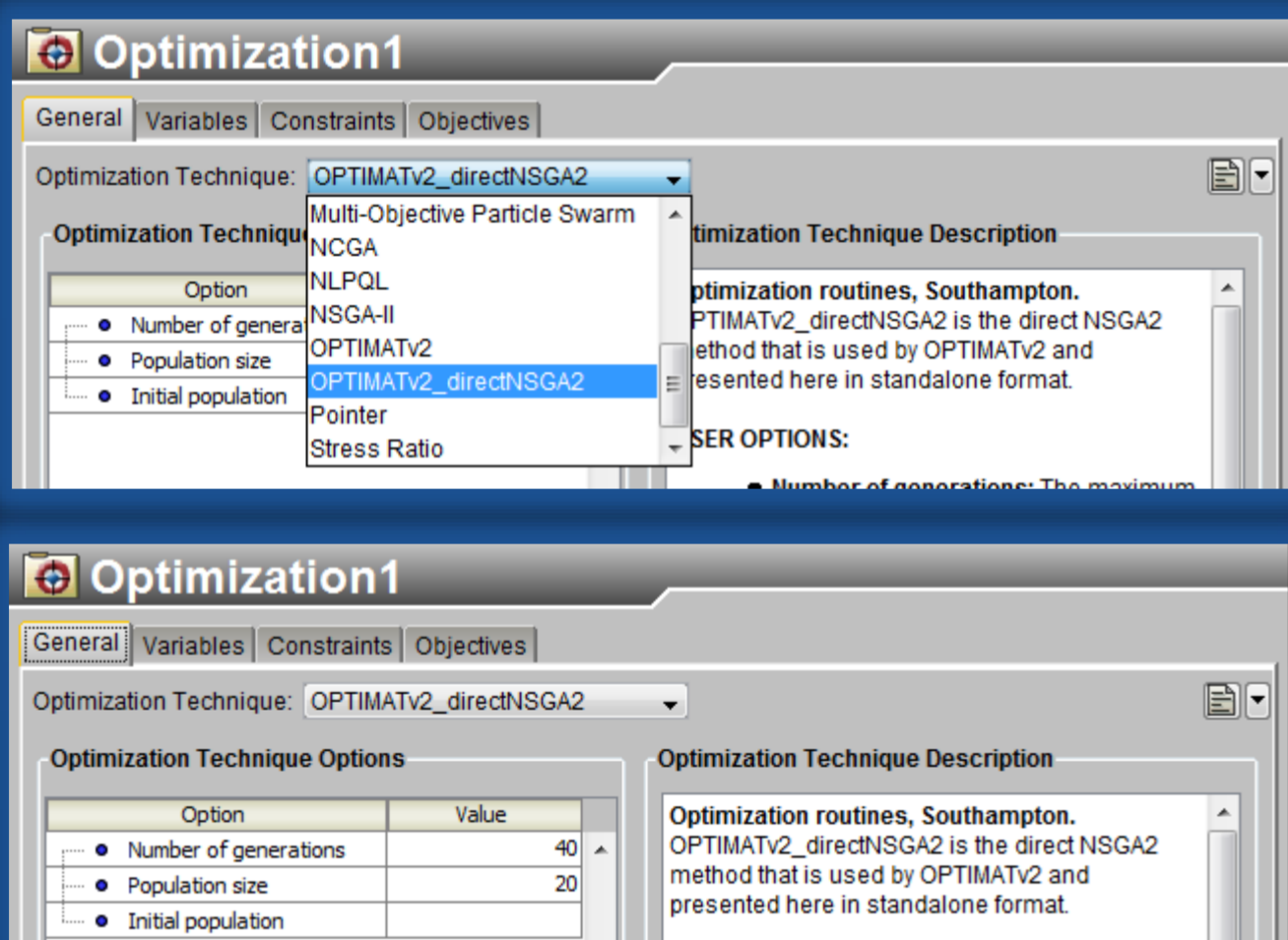
# OPTIMAT v2: Direct Optimisation tool

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For the past several years, OPTIMATv2 has come a long way to become a tool incorporating significant knowledge and experience in the field of Single and Multiobjective optimisation. It has been known to save considerable amount of time and computing efforts using its dynamically updating RSM strategies. Yet, for problems where calculation time is not an issue, OPTIMATv2 offers its powerful and highly refined Genetic Algorithms as an alternative to the existing Isight tools. The usage and setup is straightforward and the results are often significantly better.
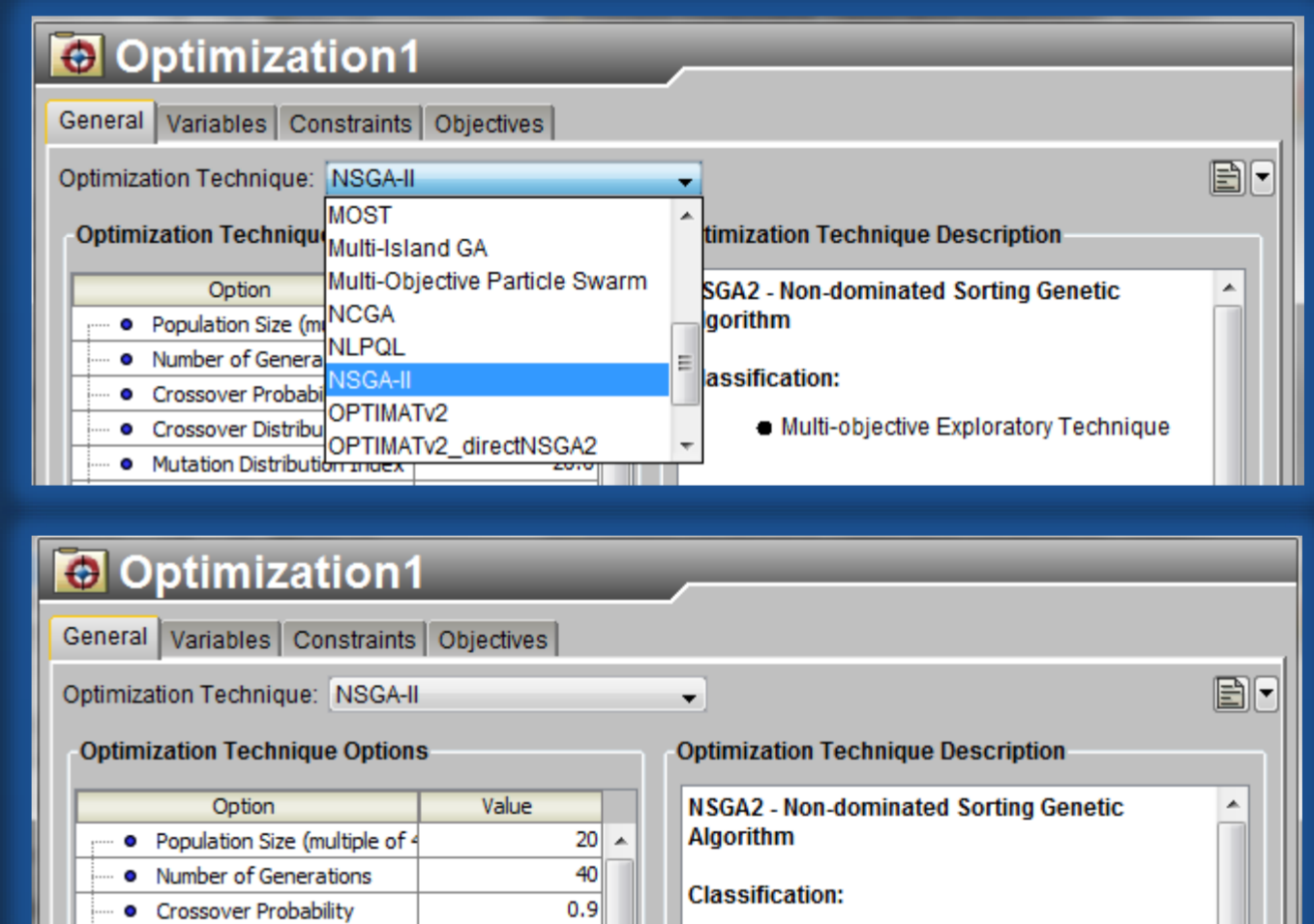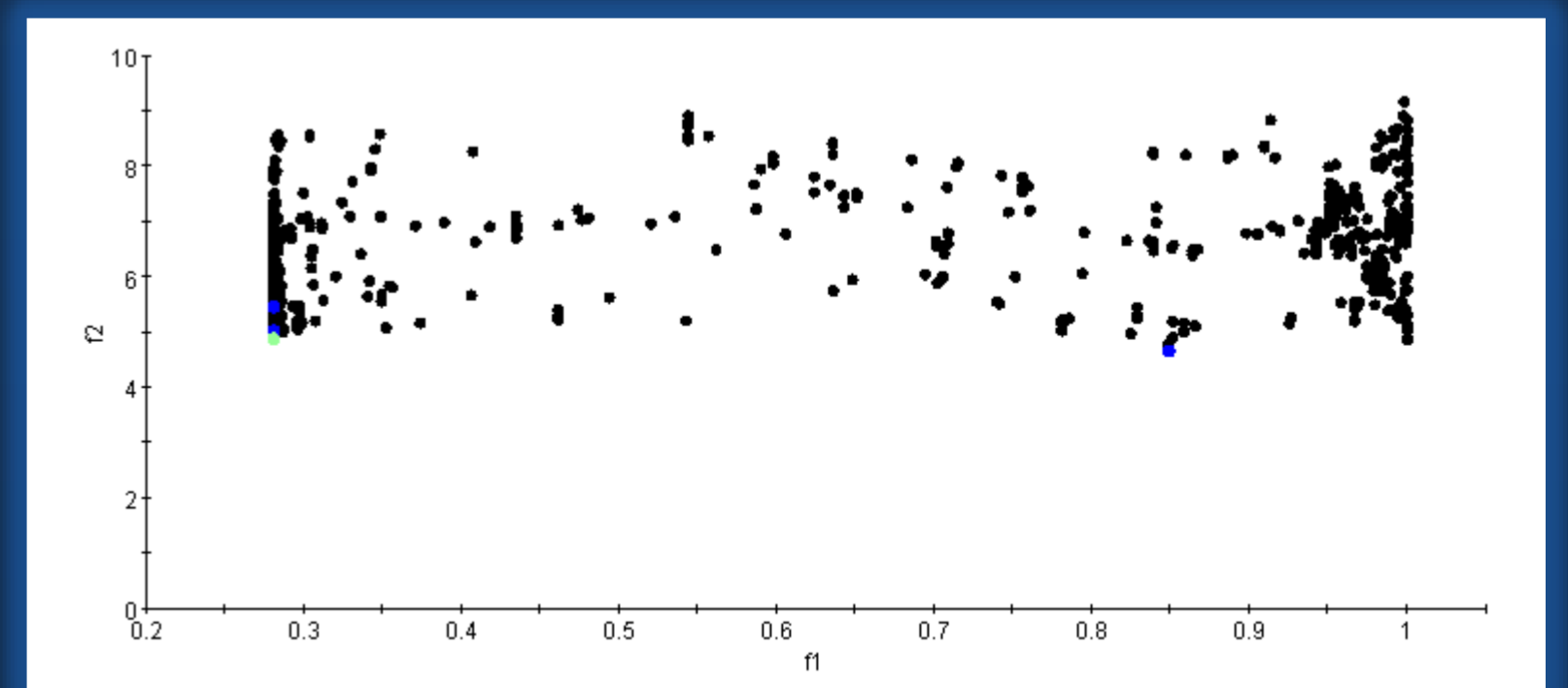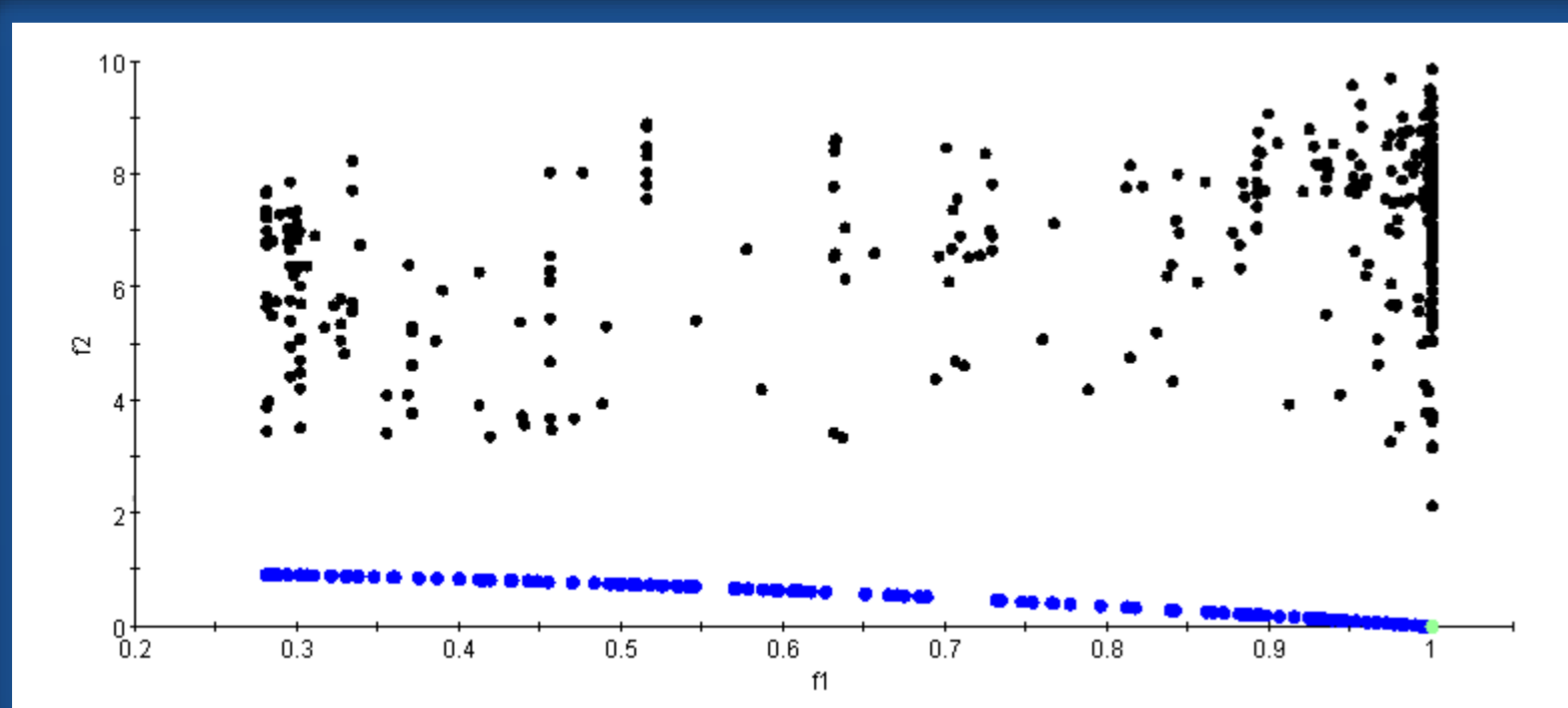
## OPTIMATv2 NSGA2
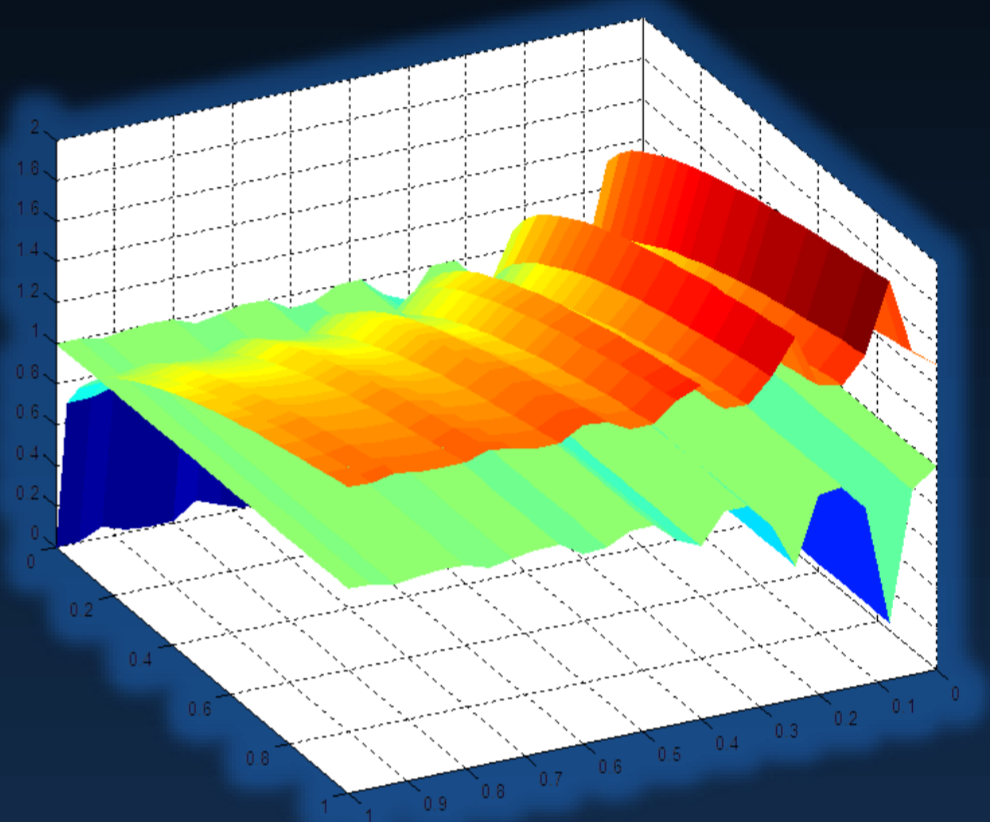
After 800 evaluations



## ISIGHT NSGA2

After 800 evaluations



**Direct OPTIMATv2 NSGA2 -** Highly optimised Genetic Algorithm for both – Single and Multiobjective problems. Uses advanced genetic operators and is available as:

➢ An Isight optimizer plugin – simple usage as shown above

➢ MATLAB toolbox – genetic operators can be called when needed, so that the user is still in control of the function evaluations.