**FRCG Algorithm Improvements**

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Based on Zilong’s SolverFRCG.F90, I made the following improvements,

1. Computing the gradient based on the control variable’s mask.
2. The line search scheme is improved to allow more aggressive search. Zilong used lower bounds to modify the initial guess and the gradient so that it guarantees the constraints to be met. However, at every line search step, there is possibility that the new points may satisfy the lower bound constraints. Therefore, instead of setting the gradient at step-length one, I have reset the constraint bound at every line search step.