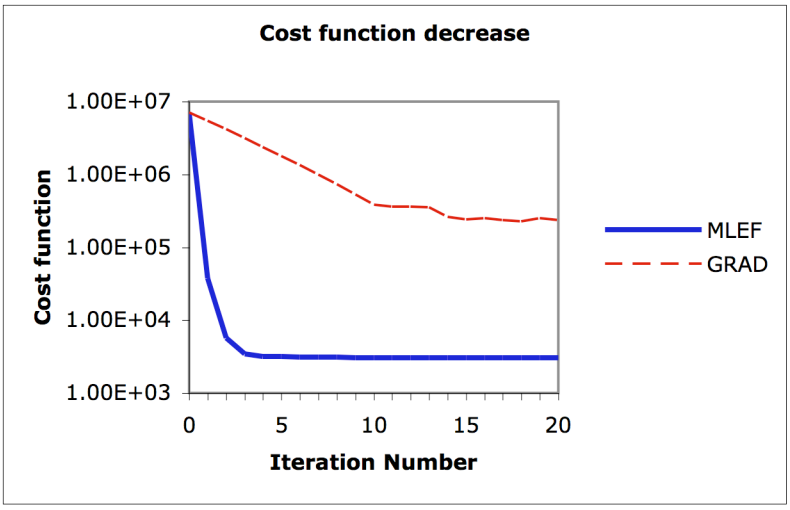
MLEF with nonlinear observation operator

(*a*)



(*b*)

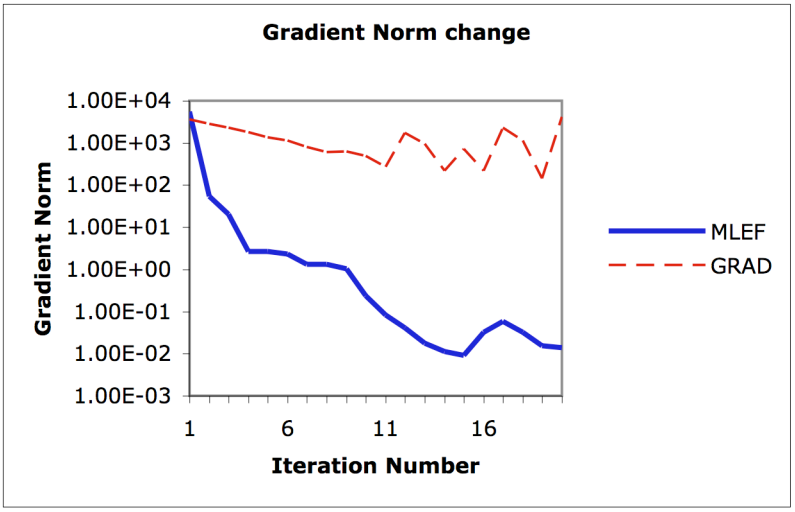


Fig.2. Nonlinear observation operator $h(x) = x^3$: minimization with the MLEF (full blue line) and with the Fletcher-Reeves nonlinear conjugate-gradient (dashed red line), in terms of the: (a) cost function, and (b) gradient norm. The results indicate much better performance of the MLEF, suggesting its applicability in nonlinear data assimilation.