

High Performance Computing

AE3-422

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Question 1

Figure 1 shows the analytical solution against computed solution using the static equations. The computed solution shows strong correlation to that of the analytical.

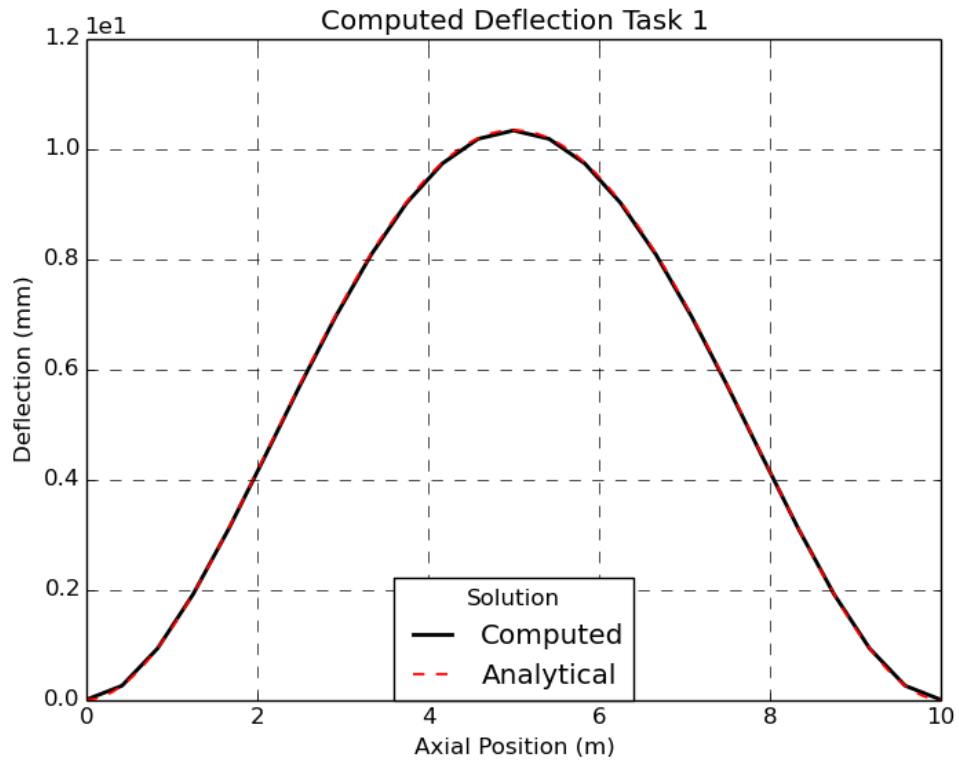


Figure 1: Static against analytical solutions.

Matrices have been set up in banded format to minimise the memory footprint. Then the system is solved utilising Lapack[?] function DGBSV. However to utilise the Fortran routines in BLAS[?], column-major storage format has been utilised which goes against natural C++ format.

Question 2