1 SUMMARY

This subroutine evaluates an approximation to

\[ \text{ERFC}(X) = \frac{2}{\sqrt{\pi}} \int_x^\infty e^{-t^2} \, dt \]

2 HOW TO USE THE PACKAGE

2.1 The Argument List

The single precision version

\[ \text{CALL FC07B}(X, \text{ERFC}) \]

The double precision version

\[ \text{CALL FC07BD}(X, \text{ERFC}) \]

\( X \) is a REAL (DOUBLE PRECISION in the D version) variable which must be set by the user to the value of the argument \( x \). It is not altered by the subroutine. Restrictions: \( 0 \leq X < \infty \).

\( \text{ERFC} \) is a REAL (DOUBLE PRECISION in the D version) variable which is set by the subroutine to the computed value of \( \text{erfc}(x) \).

3 GENERAL INFORMATION

Use of common: none.
Workspace: none.
Other routines called directly: none.
Input/output: none.
Accuracy: 12 figures.

4 METHOD

The approximation to the function is given in National Physical Laboratory Mathematical Tables, volume 5, Chebyshev series for mathematical functions (HMSO 1962) by C.W.Clenshaw.