polysurf – performance test

-a surface based on bilinear interpolation between 4 polylines implemented in MATLAB®

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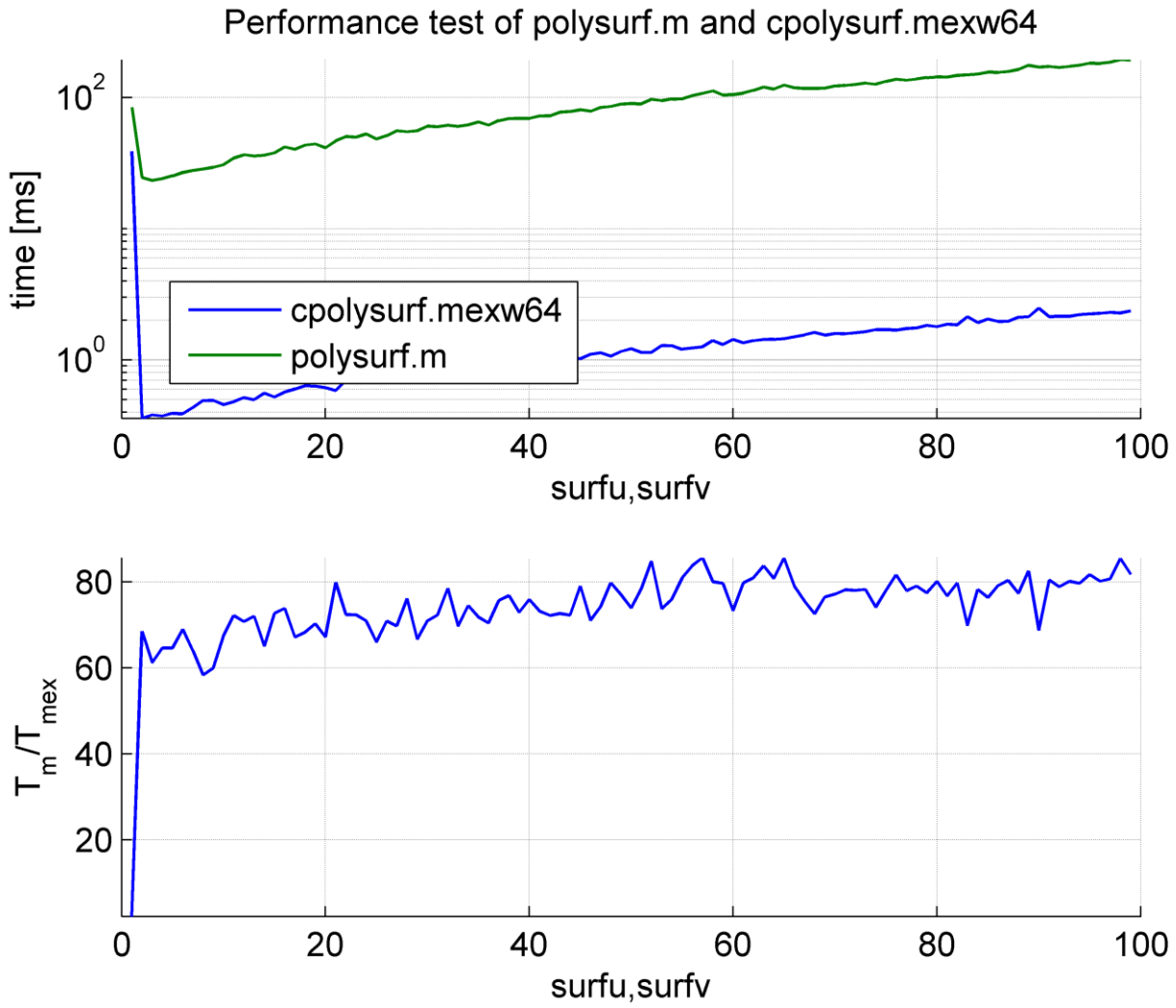
Computational time of cpolysurf.mexw64

- The MEX-implementation of polysurf ”cpolysurf.mexw64” has considerable short execution times when compared with the m-file implementation in ”polysurf.m”. This becomes notable when increasing the number of surface segments.



Numerical accuracy of cpolysurf.mexw64

- The MEX-implementation of polysurf ”cpolysurf.mexw64” uses 16-bit fixed point values for the surface parameter values. The resulting error in the X-, Y- and Z-directions of the final surface is relatively small, in the order or 10^-5, when compared with the m-file implementation in ”polysurf.m” which is based on standard MATLAB® functions calls.