



Fig. 4. The simulation of the flow over the terrain: (from bottom) set of points, surface mesh, volume mesh, isolines of velocity, isolines of the mass fraction Y .

Conclusion

This paper is focused on the numerical simulation of the mixture of two inert perfect gases in 3D. The finite volume method is applied for the solution of the system of equations. The modification of the Riemann problem and its solution was used at the boundaries. All codes were implemented into the own-developed software. The numerical examples were presented. The original intention was to use the modified software for the quick estimation of the gaseous pollution of the air. This may be critical in the case of the sudden leakage of the substances hazardous to health. The estimates computed with this software are undoubtedly more precise than a simple set of concentric circles. Further development and comparison with the ex-

perimental data (from the wind tunnel) is still in the process.

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