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NOMENCLATURE

t time

U the weight of the velocity vectors in the x direction
 V the weight of the velocity vectors in the y direction
 W the weight of the velocity vectors in the z direction
 P the pressure on the fluid
 Div the divergence of mathematical operator
 Grad the gradient of mathematical operator
 Su the generalized source terms of the conservation of momentum equation
 Sv the generalized source terms of the conservation of momentum equation
 Sw the generalized source terms of the conservation of momentum equation
 C_P specific heat, J. kg-1. K-1
 T temperature
 k thermal conductivity, W. m-1. K-1
 S_T the internal heat source

Greek symbols

ρ Density, kg. m-3
 μ Dynamic viscosity, kg. m-1. S-1