1023-35-1141 **Ning Ju*** (ningju@math.okstate.edu), Department of Mathematics, Oklahoma State University, 401 Mathematical Sciences, Stillwater, OK 74078. *The Global Attractor for the Solutions to the 3D Viscous Primitive Eqautions in H^2 space.*

Uniform boundedness in H^2 space for the global (in time) weak solutions is proved for the 3D viscous Primitive Equations (PEs) under properly posed periodic boundary conditions. It is also proved that the finite dimensional global attractor exists in H^2 space attracting all the solutions, weak and strong, in the H^2 topology. These results can be extended to the non-periodic case with proper adjustments. (Received September 25, 2006)