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Ning Ju* (ning.ju@okstate.edu), 401 Mathematical Sciences, Department of Mathematics,
Stillwater, OK 74078. *Some New Results about Solutions of Primitive Equations.*

The Primitive equations are a set of nonlinear evolutionary partial differential equations in Geophysics modeling large scale ocean and atmosphere dynamics. Existence of global-in-time strong solutions to this system was obtained independently by Cao-Titi, Kobelkov and Kukavica-Ziane. However, some other related problems about the solutions remain not completely resolved. Some results recently obtained by the speaker about existence, uniqueness and regularity of solutions of Primitive Equations will be reported. (Received February 23, 2015)