Problem Set #3

Advanced Mesoscale Meteorology

METR 6413, Sec. 1

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Handed out: Tues., 6 Oct. 2020

Due: Tues., 13 Oct. 2020

1. Consider the linear gravity-wave analysis we did in class. Repeat the analysis, except for the case where ubar = a *non-zero* constant.
2. Repeat 1, but for the case in which dubar/dz = constant. In this case, just write down the equation for w’; don’t solve it or seek a dispersion relation.
3. Repeat 1, but for the case in which the atmosphere is hydrostatic.