

PROJECT THREE: CONVECTION AND ATMOSPHERIC
THERMODYNAMICS

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In this project we will use the concept of hydrostatic balance to estimate the *tilt* of isobaric pressure surfaces in the atmosphere from the poles to the equator. The monthly/seasonal composite plots in this project were produced using NCEP¹ reanalysis data averaged from January 1948 to August 2017. The Earth System Research Laboratory of the Physical Sciences Division of NOAA provides a convenient [web page](#) for producing these plots.

References

- [1] American Meteorological Society, cited 2012: Virtual temperature. Glossary of Meteorology. [Available online at http://glossary.ametsoc.org/wiki/Virtual_temperature]
- [2] Wallace, John M. and Peter V. Hobbs. *Atmospheric Science; An Introductory Survey*. Elsevier. Second Edition, 2006. Chapter 1.