

Week 5 Reading Assignments and Discussion Questions

Reading Assignment:

Moran, J. M. and M. D. Morgan (1997) *Meteorology: The Atmosphere and Science of Weather*, Prentice Hall, Upper Saddle River, NJ: 530 pp.

- “Chapter 9 – The Wind” – Read pgs. 201-225

Ahrens, C. D. (2015) *Essentials of Meteorology: An Invitation to the Atmosphere*, 7th ed., Cengage, Australia: 525 pp.

- “Chapter 7 – Atmospheric Circulations” – Read pgs. 201-218

Finney, B. R. (1994) *Voyage of Rediscovery: A Cultural Odyssey through Polynesia*, University of California Press, Berkeley: pp. 401.

- Read pgs. 97-106

Discussion Questions for Lecture 8

Moran and Morgan

- What are the five forces that can affect the vertical and horizontal movement of air?
- What causes the Coriolis Force?
- At what altitude in the atmosphere is Friction most important?
- What’s the difference between a geostrophic wind and the gradient wind?

Discussion Questions for Lecture 9

Ahrens

- In which wind belt are the majority of the Pacific Islands found? Which cell of the three cell model does this correspond to?
- Based on the reading: What is El Niño and what are the general repercussions for the Western Pacific Islands? Hawaii?

Finney

- What is the Hōkūle’ā? Why is it important? What did it/they do?
- What is the region of high pressure that is known for its calm weather called? What is the latitude?