**MR3252: Tropical Meteorology**

Note-Taking Questions for Lecture Series 4

1. Why are winds over most of the deep tropics easterly?
2. Why does the intertropical convergence zone (ITCZ) shift meridionally over the course of a year?
3. What does it mean to say that a circulation is “thermally direct”?
4. In the case of equatorially centered latent heating, where would the resultant circulation response favor tropical cyclone development relative to the initial heating?
5. How do ENSO or the IOD impact the Walker circulation?
6. Is an extratropical response to persistent convection over the Maritime Continent more likely during ENSO negative (La Niña) or positive (El Niño) phases?
7. On what factors is the propagation of Rossby waves excited by near-equatorial heating dependent?
8. Where and why do annual monsoons happen?
9. Where are tropical cyclones most likely to form during the south Asian summer monsoon. Why?
10. How does topography interact with the monsoon circulation to influence precipitation?