

HW#5 – LC 11/16/2014

1. What does a (NEXRAD) Dopplar radar measure and what type of weather information can these measurements provide?
2. Draw diagrams showing what one would expect to see on the radar display (Plan Position Indicator, PPI) from a NEXRAD (WSR-88D Dopplar) radar for a
  - a. Purely converging system
  - b. An anticyclonic system
  - c. Cyclonic convergence system
  - d. A cyclonic system with maximum wind of 50km/hour that is moving towards the radar at a speed of 30 km/hr
3. What is a geosynchronous orbit? Give an example of a geosynchronous satellite. Why is such type of orbit useful for weather observations?
4. The following 1km visible imagery shows the New York Pennsylvania border. Identify the cumulus and cumulonimbus clouds in the following visible satellite imagery. What kind of weather would you expect for this region?

