



Remote Sensing - Review Questions

1. A satellite in a geosynchronous orbit circles the Earth along the equatorial plane at a speed matching the Earth's rotation. (TRUE, FALSE)
2. Polar Orbiting Environmental Satellites (POES) are the main type used in weather forecasting by the National Weather Service. (TRUE, FALSE)
3. _____ (POES/GOES) satellites provide much more detailed images of the earth than _____ (POES/GOES) satellites.
4. GOES are capable of providing image types of clouds and moisture in three primary forms:
 - a. visible, infrared, and water vapor imagery.
 - b. liquid, solid, and gas.
 - c. clear, cloudy, and rainy places.
5. Which of the following is NOT provided by ASOS (Automated Surface Observing Systems):
 - a. Rain beginning and ending
 - b. Heights of cloud bases above 30,000 feet
 - c. Rapid pressure changes
 - d. Wind shifts
6. ASOS weather observation information helps the NWS increase the accuracy and timeliness of its forecasts and warnings (TRUE, FALSE)
7. The radiosonde flight can last in excess of _____ (2/3/4/5) hours, ascend to over _____ (115,000/125,000/135,000) feet, and drift more than _____ (125/150/175/200) miles from the release point.
8. Radiosonde observations are the primary source of upper-air data and will remain so into the foreseeable future. (TRUE, FALSE)

9. The visible portion the electromagnetic spectrum includes what colors?
- red, white, and blue
 - red, yellow, green, blue
 - infrared, ultraviolet, blue
 - green, purple, maroon, infrared
10. Electromagnetic waves are like sound waves because they need molecules to travel. (TRUE, FALSE)
11. Which of the following waves is not part of the electromagnetic spectrum?
- microwaves
 - ultraviolet light
 - radio waves
 - ocean waves
12. Which type of satellite is best used to help monitor the motion of a hurricane?
- GOES
 - POES
 - Plymouth
 - TIROS
13. Unlike POES satellite, GOES satellites orbit at an altitude of approximately _____ miles.
- 13,000
 - 20,000
 - 22,000
 - 28,000
14. Concerning GOES satellites, which of the following are true?
- Always located in the same spot of the sky relative to the earth.
 - Orbits at an altitude of about 22,000 miles.
 - Can record images as fast as once every minute.
 - View is always from same perspective so motion of clouds over the earth's surface can be computed.
 - All of the above.
15. _____ (lower in the atmosphere) clouds give off more energy than _____ (higher) clouds.
- Warm / Cold
 - Cold / Warm
 - Dark / Cold
 - White / Warm

16. Water vapor imagery is unique in that it can detect water vapor (water in a _____ state) in addition to clouds.
- a. liquid
 - b. gas
 - c. solid
 - d. fluid