Parallax Worksheet / Quiz

(http://cimss.ssec.wisc.edu/goes/webapps/parallax/overview.html)

GOES-17

Q1. From GOES-17, what is the approximate offset due to parallax (in km) of a 9.1 km (30,000 ft) tall cloud over Hawaii?
A1.

Q2. From GOES-17 and over Baja, CA, what approximate direction would you need to "move" an object (i.e., a cloud) to account for parallax?
A2.

Q3. What is the parallax displacement for a mid-level cloud located at the satellite sub-point (e.g., approximately 0N, 137W for GOES-17)?
A3.

Q4. For a cloud from a rocket plume at 15.2 km (50, 000 ft) over Cape Canaveral, Florida, what is the approximate parallax displacement from GOES-West (17)?
A4.

GOES-16

Q5. What is the approximate displace (distance and direction to correct) for a 9.1 km (30,000 ft) tall cloud over Salt Lake City in Utah?
A5.

Q6. What is the parallax displacement for any level cloud located at the satellite sub-point?
A6.

Comparing GOES-16 and GOES-17

Q7. From GOES-16 and GOES-17, what is the approximate offset due to parallax (in km) of a 9.1 km (30,000 ft) tall cloud over Salt Lake City?
A7.

Q8. From GOES-16 and GOES-17, what is the approximate direction you would need to "move" an object to account for parallax over Salt Lake City?
A8.

Q9. Where is a location where the parallax distance for GOES-16 and -17 are the same, but the direction is opposite (anti-parallel)?
A9.

Q10. Is the parallax displacement an error or just a perspective?
A10.