



Discussion Answer Key

Meteorological Forecasting like a Tuskegee Airman

There are no correct answers to these questions, and are meant as a reflection for students after they finish the map activity and to facilitate more interaction within the classroom.

1. How similar was your drawn map to the real pressure map?
 - a. Students likely had maps that were similar to the true pressure map, but not exact. Allow them to discuss the similarities and differences.
2. How effective was observing the clouds at mapping atmospheric pressure systems?
 - a. This should flow somewhat naturally from the previous question. Cloud observation should be somewhat accurate, but not entirely, as meteorologists use many other tools. Primary reasons for this include:
 - i. Limited experience
 - ii. Limited resources
 - b. Teachers can explain that detailed forecasts are made using maps that include the pressure at many different points around the country, which they connect with lines called “isobars.” Air that is isobaric tends to remain “at rest,” but students did not look at isobar maps or exact pressure values.
 - c. Students only observed a short period of time, whereas professional meteorologists observe continuously.
 - d. A connection to Charles Anderson can be made here, as the development of radar and observation from above was largely influenced by him. This type of forecasting is similar to parts of what Anderson would have done, with the above bullet point’s difference noted.
3. Think about pressure. What are some other examples of things flowing from high to low pressure?

- a. Examples: Water tower, pressure cooker if opened too early, water through a narrow outlet, people in a room (they will naturally move from a very crowded area to a less-crowded area).