

GEOG 201– Map Interpretation and GPS

Assignment 04 – Interpreting USGS topographic maps

We will repeatedly read and interpret USGS topographic maps in this class. This skill is very important for anyone relying on a map to tell him or her where he or she is or needs to go. It also may be something you may be asked to do on the spot for a job interview, and is very impressive if you can pull relevant information from the map in a quick and efficient manner.

When writing your interpretation, you should imagine that you are writing it for your boss, i.e. be professional with your writing style. Pretend that you have been assigned to interpret the map so that people making decisions have all of the relevant information at their fingertips.

Papers not having run a spell check will be marked down heavily. Proof read your paper.

The Process:

Begin with the details listed in the map collar. In a list form, write down the name, series (in this case, '7.5 minute topographic quadrangle'), scale, projection, datum, date published (and photorevised date if available), and the coordinates of the NW and SE corners (in Degrees, Minutes, Seconds).

Next describe the overall setting of your map. To use the Lancaster West map as an example, you could begin with the fact that it is located in Los Angeles County, in the state of California (we know this because of information in the map collar at the top of the page). You might also want to include the northwest and southeast Public Land Survey System (PLSS) coordinates as well. Do not use information that you know about the area but is not shown on the map. You can speculate about information, but it must be written in such a manner. For example, you and I know that Lancaster is in the Antelope Valley, but does the map say this?

In the next paragraph, give a description of the natural features represented on a map. Do your best to describe the geomorphology behind the features present. Is the map located in a valley, the mountains, the coast, or a combination? What peaks are shown on the map? What vegetation is present? What about bodies of water? Make sure to give the highest and lowest points of elevation for the map.

Then describe the cultural features found on the map. What is the largest city shown on the map (or is there even a city or town shown)? What is the smallest? Is there evidence of development and urban expansion in between the time the map was originally drawn and when it was photorevised? Look for unique cultural features on the map like windmills, prisons, airports, etc.

Also look for other cities or towns that are referenced, but not shown on the map (look at the mention of Palmdale and San Fernando at the SE corner of the Lancaster West map). Try to use the publishing date and the photorevision dates to determine when certain features appeared.

Throughout the interpretation, make sure to ask questions about the map. What isn't shown? What requires ground truthing (going out into the field and making sure that the map is accurate)? This is how you can inject information you think you know, but can't prove with the map alone. Your overall paper should present a solid idea of what is shown (and perhaps not shown) on the map.

Your assignment(s)

Find the appropriate maps online (or purchase from a local retailer) and complete the following assignments by the due dates.

Assignment 04.01 – Interpret the High Vista, Calif. 1994 quadrangle. A 1-2 page interpretation is due by e-mail (mpesses@avc.edu) in Word format before class on March 17, 2010.

Assignment 04.02 – Interpret the Furnace Creek, Calif. 1994 quadrangle. A 1-2 page interpretation is due by e-mail (mpesses@avc.edu) in Word format before class on April 14, 2010.

Assignment 04.03 – Interpret the original (1998) and revised (2009) Bouldin Island, CA quadrangle. A 1-2 page interpretation is due by e-mail (mpesses@avc.edu) in Word format before class on April 28, 2010.