

MET 101: Lab Final Extra Credit

During the remainder of the semester in lab you will be drawing more isobars as well as finding and labeling high pressure systems, low pressure systems, cold fronts and warm fronts. As has been mentioned several times this semester you can obtain additional practice in performing these analyses by using the web site created for this course:

<https://facultywebsites.ncc.edu/faculty/sci/lehenbg/met101.html>

Once you load this page you will see your web site for MET 101. In order to encourage you to use this web site you can receive extra credit points, which will be added to your laboratory final exam, by performing some of these analyses. For extra credit, you may do the analyses found under the heading **Lab 8 - Warm and Cold Fronts** on the web site. The better you become at doing these the higher your lab and course grades will be.

Please note that:

- **a surface map analysis will be 20% of your lab final exam**

What do you need to do to earn the extra credit points?

In order to receive extra credit you must complete the entire analysis yourself and then compare it to the answers generated by the computer (be sure to print the data and answers at the same time as they change each hour). You will receive one extra credit point, up to a maximum of 5, for each analysis that you can find where the computer has made an error in its analyzation. By doing this you are showing that you know the correct way to do these analyses and that you can spot errors on computer generated maps. Circle the one error that you find on the computer generated map.

The following is what you need to do for a surface map analysis (make sure you use the proper colors):

- draw all possible isobars
- find all high pressure systems
- find all low pressure systems along with their warm and cold front (Note: Do not look for fronts in or west of the Rocky Mountains)

Then compare your completed analysis with the computer generated results.

You can only hand in one analysis from each day. In other words you can not do analyses from successive hours. You should try to do one analysis per day. When you find an error, circle it and show it to your instructor along with your completed surface map analysis. **You may only show these to the professor during office hours or during a lab break. The professor will sit with you at that point and review your maps and show you what mistakes you made and help you correct them. This way you can learn from your mistakes so that you don't repeat them on the lab final.**

The last time I will look at and accept these is during the last office hours before the lab final. Please refer to your syllabus for the days/times of office hours and send me an email so that I know you are coming to do this.

Notes:

- 1) Generally at most there will be a total of 4 systems (high pressure or low pressure) on a weather map of the United States on any given day. On some days there might be two or only one main system. On some occasions, if a large strong high pressure system was sitting somewhere near the state of Ohio it might even be possible that there wouldn't be any low pressure systems with fronts east of the Rocky Mountains.
- 2) Do not look for fronts in or west of the Rocky Mountains.
- 3) Since there are many different maps each day, no two people can do the same analysis.
- 4) You must show me both your completed map and the computer's analysis.
- 5) Your map must be complete and correct (including colors), following all the appropriate rules, in order to receive a point.
- 6) Remember the computer does not use the same colors or labeling formats as we do in lab, consequently these differences are not considered errors and do not count.
- 7) The instructor reserves the right to decide if the computer's mistake warrants the rewarding of a point.
- 8) Only one point per map even if you find 100 errors on a given map.
- 9) Remember to print your maps in **LANDSCAPE** mode.
- 10) Keep in mind that the computer generating both the data and results can and does malfunction. Consequently there may be several times periods where the data and answers are not available. Please inform your instructor if this problem persists for more than two (2) days.
- 11) Do not ask your instructor to locate any errors for you. You must find them yourself.
- 12) You don't have to do all 5 analyses to receive points. If you only have time to do one analysis then you will receive one point. In other words you will receive one point (up to a maximum of 5) for each analysis you complete.
- 13) The goal of this extra credit is to provide you with additional practice in performing surface map analyses. So far you have only done a handful of these in the lab exercises. The only way to get better at them, as with anything in life, is to practice them repeatedly. The reason why these must only be turned in during office hours is so that I can grade them in front of you immediately and show you where your making mistakes. This way you can learn from your mistakes so that you don't repeat them on the lab final exam. With all this in mind, you cannot turn these in the day of the final or hand them in after a lecture and walk away. They must be turned in during office hours.**