WiKi Navigation

Wiki editing in general

Depending on the type of the wiki, there are several ways to edit your page. But don't worry: The best thing of a wiki is, that nothing is lost. The old version will be there - and if someone changes your version of the page - your version will also be there. The options for editing, commenting viewing history, map and files may all be accessed from tabs at the top (*1* in screenshot below) and if you are using a non-Boost theme, also from links in the navigation block (*2* in screenshot below):



- The **View** tab allows users to display and view the wiki page.
- The **Edit** tab users to edit the wiki page.
- The **Comments** tab allows users to see and add comments about the wiki - providing comments are enabled on the site.
- The **History** tab allows users to see what has been altered in the wiki. Compare edits by clicking the "Compare Selected" button. Click the "Restore" button of the version you wish to restore if the latest edit is unsuitable
- The **Map** tab allows users to view areas of the wiki such as a list of pages, updated or orphaned pages etc. (Orphaned pages are pages not linked to anywhere.)
- To select what you want to see, click the Map menu dropdown box.
- The **Files** tab allows users to access any files which have been added to the wiki.Only the teacher role can by default add and manage files to the **Files** tab, but you can allow students to add and manage them with a permissions override to the **Manage wiki files** capability (mod/wiki:managefiles) in any

Once you click the WiKi link: Week-7 Collaborative Wiki, it will take you the Wiki page named “Surface Weather Map”. Under that page, there are two links, one for Reading and the other for Activity. Reading link lists the reading resources for this week. If you find some useful reading resources, you can add in the list by clicking Edit tab, adding resources on the new page, and hitting save.

It’s the same way the Activity page will also work. Activity page is the main page you will add your answers for this exercise by editing each earlier post. Since this is a collaborative work, I am **expecting one final outcome from each group instead of individual submissions.** So, the output is a single outcome collaboratively contributed by each member of the group. For example, for the isobar map I posted as my edit to the WiKi, you can **edit it by attaching your own creation** or adding something that was not in there you think need to be or **comment** on the edit made by the first member of the group suggesting for refinements. This is a perfect collaborative exercise, so there are no inferior or superior ideas until the group reaches to a consensus. Please don’t hesitate to put your ideas or don’t take the disagreements as unpleasant. I expect you all to work in a cordial and respectful manner to complete this exercise. You can communicate outside the WiKi forum if that adds more nicety before making changes. Don’t worry though your changes/edits won’t be lost. The history will record each detail of who made what contributions and that is the one I will review for grading as well.

You will have time until Wednesday 11:59 pm to add your suggestions, comments, and edits on the given activity.

The Activity is listed below:

Activity

The attached map (Surface Observations.pdf) is the map of surface observations that has hourly surface weather data for US for 21 UTC October 6, 2019
(source: https://www.wpc.ncep.noaa.gov/sfc/sfcobs/sfcobs.shtml). We will use this map to complete this WiKi activity.

1. First, practice decoding the plotted values of wind, sea-level pressure, sky cover, dew point, and temperature on the attached sample data (Decode_practice) using the keys How to read station data (attached file).

i) Report the meaning of each of the symbols and numbers on the provided sample data.

2. Now that we have learned how surface weather data are plotted on a map, we will look at some analyses of the data that can be done. On this analysis, we will first draw isotherms, temperature contour lines at 10 intervals on our surface observation map. For this task: (Hint: see instructions on drawing)

i) Connect points on the map that all have the same temperature at the interval of 10°F. You would need to interpolate the isotherms between plotted temperature values on the map. For example, you would expect to find 50°F isotherm passing between the temperature values of 54°F and 45°F.

ii) Separate regions (with a shaded color) that are warmer than a particular temperature from regions that are colder.

iii) Save the image as a JPEG file and attach on your WiKi.

3. A) Now with the same data given on surface observations, draw isobars, line connecting equal pressure. Isobars are generally drawn at 4 mb intervals. You would need to interpolate the isobars between plotted pressure values on the map. For example, you would expect to find 1008 mb isobar passing between the pressure values of 1009.7 mb and 1006.8 mb.

B) Locate closed centers of high and low pressure. Symbolize them on the map using the letters H and L, respectively. **Save and upload this as well.**

4. Now interpret your isobar map. The pressure pattern can tell you on:

i) Convergence and divergence

ii) Fast winds and slow winds (Also, note the wind speeds plotted on the map (the flag like symbol) e.g., 5 knots or 25 knots). Does your interpretation correspond with those given values?

iii) Which pressure system (lows or highs) experiences steepest pressure gradient?

iv) If you wanted to install wind turbines to generate electricity, would you search for a location that typically experiences a strong pressure gradient or a weak pressure gradient? Explain.

Extra-Credit

5. Based on the wind direction, high/low centers, and isotherms,

i) Identify fronts (cold fronts, or warm fronts), and **ii)** any development of storm system (cyclones) and draw them on the map.

Instructions on drawing:

1. Open the attached surface observations .pdf document and using zoom in/zoom out tools, zoom the page to 100%.
2. Press following keys together: Windows key () + Shift Key + S
3. Using the rectangular snip tool, snip the surface observation map, and open the snipped image on **snip and sketch program** of your computer. You can optionally use **snipping** tool to copy the map and **paint** tool to edit (drawing and adding text). Save your edited map as JPEG to attach.

For reference of similar example, read the steps and explanations on the links below:

http://www.atmo.arizona.edu/students/courselinks/fall12/atmo170a1s1/coming_up/week_3/lect8_sfc_map_analysis.html