**GEOG 310 Exercise Three (F2022)**

**MAP INTERPRETATION**

**10 points**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student#:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Note: This exercise uses maps found on pages 2-6 in the “Map Supplement”, which is a 30-page pdf file, available on the course Canvas page.* *Each of the five question is worth a total of two points.*

1. Questions about the 300 hPa North American map (page 2 in map supplement):

a. What general feature of the upper troposphere does this map help analyze?

b. What two variables does the map display, and what are their units?

c. What other information is on the map and how does it help identify the

highest wind speeds areas?

2. Questions about the 500hPa hemispheric map (page 3 in map supplement):

a. What two variables does the map display, and what are their units?

b. What features of the upper atmosphere does a map with these

characteristics (centered on the North Pole and viewing the entire

Northern Hemisphere) help analyze?

3. Questions about the 500 hPa North American map (page 4 in map supplement):

a. What two variables does the map display, and what are their units?

b. Identify an area in the **north-central USA** with the highest vorticity

values on this map.

c. What general features of the upper troposphere does this map help

analyze?

4. Questions about the North American Surface map (page 5 in map supplement):

a. What three analyses does the map display?

b. Identify one of the areas in the **northern USA** with frozen precipitation

(snow) values on this map.

c. Where is the center of surface low pressure in the **north-central USA** on

this map?

5. Questions about the North American Composite map (page 6 in map supplement)

a. What two analyses are combined in this map presentation?

b. What are some of the advantages of this combined presentation?