

## Final Write-up Instructions/Suggestions: G109 Weather Project

Turn in the following:

- ◆ All printouts from the web as either,
  - Figures numbered appropriately (in order of appearance in text)
  - Appendix – in some sort of logical order (i.e., chronological or by image type)
- ◆ Station models
  - Page WP-7 One per project (per group)
- ◆ Final report (with tables and figures)
  - Tables (at least two)
    - 1 is page WP-7 station models
    - 2 is table with ALL of your measurements
  - Figures
    - Maps and satellite images which you explicitly discuss
    - Graphs of your data: These can be done by hand or with a graphing program (e.g. Excel) – at least two graphs

### Report Guidelines

- ◆ Maximum 5 double-spaced pages
  - Watch grammar and spelling!
  - Cite your references
  - Titles for figures and tables
  - Use headings for individual sections
- ◆ **Title**
  - Descriptive title
- ◆ **Introduction**
  - State the objective and purpose of the project
  - Tell me which 3-day period you had
  - Where was the study conducted?
- ◆ **Methodology**
  - How/what/where/when did you collect the data?
    - Visual observation – cloud cover and type, wind direction etc...
    - Direct measurement - Air Temp & wet bulb temp (to calculate RH and dewpoint temp.), Pressure etc...
  - Indicate what instrument you used for which measurement
    - e.g., Satellite images and other maps collected from web
- ◆ **Results**
  - Present your data (WITH S.I. UNITS)
    - EXPLAIN your data -summarize
  - Describe what happened when
    - Make connections between data

- e.g., large temperature drop combined with changing pressure/wind direction
- Describe any measurements that looked odd
- Describe errors associated with data collection (human and instrumental, we talked about this in Lab 4)
- Refer to figures and tables rather than relying entirely on description
  - You can insert tables/figures in text where you first refer to them
  - Or, attach them all at the end of the text
  - Remember to give them titles (it is ok to write them by hand)

◆ **Discussion and Interpretation of the Data**

- Explain why the changes happened when they did
  - Cold front?
  - Mid-latitude cyclone?
- Tell me when fronts passed over Bloomington and how it affected the weather
- Where were the centers of High and Low pressure?
  - Remember the flow around highs and lows and try to relate it to wind direction at the surface (on surface maps)
- What types of air masses did we experience? Any precipitation?
- Explain the daily patterns you observe (e.g., rise and fall of temperature)
- Compare your data to that on the web

◆ **Conclusions**

- Final summary

◆ **References**

- Textbook
- Web
- Journals

## Grading

<b>Overall Presentation</b>		4 Points total	
Clarity, Grammar and Spelling		1	
Organization – sections with subheadings -		1	
Graphs – titles and labels -		1	
Citations/References		1	
<b>Data Collection</b>		6 Points total	
Field measurements		3	
Surface station models, Highs, Lows, Fronts (p.WP-7)		1	
Maps, Satellite images etc...		2	
<b>Data Analysis</b>		6 Points total	
Quality and Clarity of Graphs and Tables		3	
Written description w/references to graphs and tables		3	
<b>Data Interpretation</b>		4 Points total	
Correct description of synoptic scale processes		1	
Linkages to local scale		2	
Appropriate reference to figures		1	