Rubric for Student Reports: 12.307 – Weather and Climate Laboratory

	1. Deficient	2. Fair	3. Good	4. Excellent
Completeness	misinterpreted project portions of project incomplete no evidence for conclusions misuse of ideas no attempt to integrate laboratory and synoptic observations late without permission	 project not fully understood jargon obscures arguments observations or data insufficient incomplete analysis no discussion of relevant theory disjointed discussion of lab and synoptic data 	+ all aspects of project carried out + clear discussion of data in terms of theory + attempt to integrate laboratory and synoptic data	++ aims of project and report clearly stated ++ excellent balance between theory and observation ++ laboratory and synoptic experience seamlessly drawn together
Data/Analysis	 no data or fudged data excuses for not collecting data ignores feedback no use of theory to interpret observations or data no idea what to do with data no visuals, pictures or diagrams no discussion of errors 	 random or sporadic data collection little pattern to data collection inaccurate or sloppy representations of observations and/or data 	 + careful records of a variety of measurements + enough data to test theory + full utilization of data + appropriate graphical representations employed + appropriate discussion of errors + many questions arise from data 	++ original data carefully documented and graphed ++ data professionally collected ++ novel techniques employed and matched to problem ++ error analysis ++ designed further data collection to answer questions and test ideas
Organization	no sections, headings, subheadings rambling, disparate sections supporting elements not tied into text lack of coherent arguments	- many organizational elements present (abstract, introduction and conclusion), but weak logical flow - sections not well integrated	+ clear main point + articulation of goals + all relevant sections present + sections well balanced + outline clearly evident + headings and subheadings used	++ logical thought progression ++ all elements relevant and well incorporated ++ structure clear and useful ++ logical structure appropriate to the report + appendices included if relevant
Aesthetics	contains many errors (poor grammar, misspellings, difficult font, inconsistant style, lack of page numbers, incomplete sentences) lack of proofreading evident.	few technical errors consistent layout form does not interfere with readability appears rushed or unrefined	+ well edited + appropriate use of technical terms + use of graphics (tables, graphs, drawing) where appropriate + correct length + varied sentence structure + well proofread	++ model of clarity and good writing ++ a joy to read, novelty, personal touches ++ graphics well integrated ++ constructed with the reader in mind ++ well worth sharing with others ++ edited to proper length
Use of Sources	no references to sources no evidence of readings no evidence of note taking in class personal opinion treated as universal	 inappropriate or gratuitous incorporation of references incorrect or insufficient citations readings misinterpreted or ignored lack of the most appropriate citations from required readings 	+ frequent, reliable citation to support several points + incorporation of relevant required readings and class discussion + readings shown to be clearly understood + evidence of listening to other's ideas in class	++ variety of appropriate sources, articles, books, WWW sites ++ quotations from classmates, professors ++ integration of additional readings ++ using ideas from other classes ++ bringing to bear new insights and information