Prospectus Review Guide for Ph.D. Students in Meteorology

Revised September 2007

The goal of the prospectus review is to allow an opportunity for the student’s Ph.D. committee to provide timely input to the student regarding the course and scope of his/her Ph.D. dissertation research. The prospectus review consists of two parts, (i) a written prospectus and (ii) an oral presentation. This general guide does not supersede the committee’s authority to define the content of the prospective review. Therefore, it is incumbent on the student to gain a clear understanding of what is expected from his/her particular committee, at the outset of process.

The written prospectus is akin to a research proposal and typically will have a length of ~8 to 12 pages of text, with a total between ~15 and 20 pages including references and figures. The following general elements may be considered for inclusion in the prospectus, but the final content and length needs to be tailored to meet the requirements of the student’s committee.

1. Introduction: Provide a clear statement of the motivation and goals of the research. Give a clear understanding of how the proposed research relates to previous work in this area as demonstrated through a focused literature review presented in this section.

2. Data and methods: Describe the data sets, numerical models, and model output to be used in the research, including discussion of the resolution and accuracy of the data. In particular, be sure to demonstrate that the resolution of the data (whether observational or model output) and the scale of the phenomena being investigated are a match.

3. Preliminary results: Provide some evidence in this section that the approach promises to lead to the desired outcome of meeting the goals of the project.

4. Task remaining: Provide a set of specific research tasks with a timeline to complete the research and the dissertation.

For best results, it is strongly advised that the student take the initiative to meet with each committee member in person to go over the draft written prospectus. This step will help to ensure that each faculty’s concerns have been satisfactorily addressed prior to scheduling of the oral presentation.

Past precedence suggests that the oral presentation should be prepared to last ~ 30 minutes (when timed without interruptions) and cover the primary components of the student’s written prospectus. The student should be prepared to answer questions specifically pertaining to the research areas outlined in the prospectus. In addition the student should be prepared to answer fundamental questions in meteorology that are more broadly pertinent to their research.