

What Makes a Great METOC Thesis?

Thesis Objective: development of critical thinking, analytical and problem solving skills while learning the discovery process in the context of atmosphere and ocean processes.

A fully successful thesis experience should be:

- ... **founded on a graduate-level research problem** – solution of a significant scientific problem or testing of a clearly defined hypothesis that generates new knowledge using state-of-the-art measurement and/or analysis techniques.
- ... **motivated by a strong personal interest** – self-motivation leads to getting started early, digging deeply into the problem, and caring about the quality and dissemination of results.
- ... **mentored by expert faculty** – the thesis is first and foremost a learning experience that is enhanced through the experience and expertise of faculty that are dedicated to the development of the student research experience.
- ... **supported by adequate resources** – solution of the problem or testing of the hypothesis may require data sets, measurement or computational equipment, travel funds for field work or fact finding, and often requires the support of research staff with particular expertise or analysis skills.
- ... **applicable to a significant USN or USAF problem** – military students need to work on military relevant questions that can span the range from basic to applied research topics.
- ... **supportive of the student's academic specialty (USAF) and/or follow-on assignment** – In the case of USAF students, an academic specialty is assigned. Course work and the thesis topic needs to support building expertise in the area of specialization.
- ... **publishable in a reputable journal** – Though often difficult during the students tenure due to time constraints, publication of the results individually or in combination with other theses demonstrates the quality of scientific work and communications new understanding the scientific and operational communities.