Project descriptions are the “meat” of every proposal. They contain the prose that MUST convince the proposer’s peers that an idea has scientific merit, an approach is feasible, and the proposer(s) are qualified to accomplish the work. For this class, because students don’t have much to report in the way of prior results, we will skip the third part of the project description. Instead your project description will contain two primary parts: (i) justification of the science and (ii) an explanation of the methodology that will be used to accomplish the stated goals. For this assignment you will be creating a near-final draft of the scientific justification.

Generally, a justification of your science program includes an introduction that explains what the project is and why it is important plus a summary of prior work crediting those (perhaps including you) who have previously addressed the questions raised in the proposal (or undertaken the work that has led to the questions to be asked). As with your pre-proposal, part I of the project description must identify the area of operations (please provide a figure that includes latitude, longitude, and any other relevant information) and briefly explain the scale of observation that you need to make in order to accomplish your goals. You DO NOT need to identify the instruments or datasets that you plan to use at this juncture – that information will be spelled out in great detail in part II of the project description.

As you’ve heard in class several times now, some redundancy is a good thing. So are lists of specific questions that you plan to address and thoughts about what potential answers might tell you. For example, in studying collapse features in volcanic terrain on the deep ocean floor, I might ask “what is the distribution of these features relative to the axis of the spreading center?” If the distribution is linear and parallel to the ridge axis, I’d conclude that diking was exerting control over the formation of these features. If they were randomly distributed, then lava drainback is more likely to be a dominant mechanism. Gear your thinking toward understanding processes if your proposal has a scientific bent. For those of you looking at technological innovations instead, summarize the broad range of topics that your approach could address.

All project descriptions must be typewritten on 8.5x11 inch paper in 12-point font with single spacing and 1” margins. Overall length of part I should be 5-7 pages. You may include as many figures as you think reasonable, but the accompanying text must have sufficient information to convince reviewers that you’ve picked a good project. Please email a digital copy of the project description to Margo by Monday, November 7th at the latest. I’d like to get them by Thursday, November 3rd, but as long as they make it to my inbox before I fly out on Monday, I will have a chance to give you comments before Thanksgiving and the final push to get the project finished before the end of term.