

Tasks & Timeline

1. Give best prediction of river flow in the Nile for the next 100 years, based on existing knowledge (journal articles, books, etc.). Include quantitative changes, i.e. change in mean, standard deviation, variance of flow. Write up findings in 3-4 pages. [2 WEEKS, due Monday, 3/8]
2. Get the reservoir simulation model working--calibrate with Merowe dam specifications, and run it with the 100 year flow prediction. Calculate benefits, i.e. how much electricity is generated. [next 3 WEEKS]
3. Propose any changes to the design that will improve benefits, i.e. increase electricity generation. Changes may include those to the physical design (e.g. dam height) or operating rules. Justify costs. [next 5 WEEKS]
4. Prepare final paper and presentation.