USING MALLOW'S C-STATISTIC WITH SOFTWARE

In arc:

- Run the full model.
- Select "Examine submodels" from the model menu.
- Use the options:
  - "Add to base model (Forward selection)"
  - "Delete from full model (Backward selection)"
- The first option will:
  - Start with the "base model" (specified by user)
  - Fit all submodels obtained by *adding* just one term to the base model
  - Give C_I for each such submodel
  - Add the term giving *lowest* C_I
  - Repeat with the new model (one additional term) as base model
- The second option will:
  - Start with all terms in the full model
  - Fit all submodels obtained by *deleting* just one term from the full model
  - Give C_I for each such submodel
  - Drop the term giving the smallest C_I
  - Repeat with the new model (one less term)
- Use *both* options, since each might give some submodels not given by the other.

Other software:

- Varies.
- Features called "Forward selection" and "Backward elimination" might *not* give C_I. (*Note*: Some software has features with these names that decide to add or delete terms based on F or t-statistics. These are *not* recommended – see pp. 280-283.)
- Features with other names (e.g., "Best subsets") might give C_I
- You can run a submodel and calculate C_I by hand, but using a built-in feature is more convenient if available, since you get C_I for several submodels at once.