Adaptation will require a steady stream of reliable scientific information.

Scientific information on adaptation is judged unreliable.

Cascading Uncertainty
But why is scientific information on adaptation judged unreliable?

- There are too many uncertainties.
- “Point estimate” methodologies
- But is uncertain information not useful?
  - Of course it’s useful!
    - Projected hurricane paths
    - Surgical outcomes
    - Even the angle of re-entry for the space shuttle
According to Peter Haas, scientific information is usable knowledge if it meets the following criteria:

• **Tractable to users**
  – Works in the real world

• **Is credible**
  – Passes the sniff test

• **Is legitimate**
  – Product of formal scientific protocol

• **Is salient**
  – Arrives in time to be useful
Examples of Usable Climate Knowledge

- Palmer Drought Severity Index
- Heating and Cooling Degree Days
- Crop Moisture Index
- Plant hardiness zones