Roni Avissar
University of Miami

We faces major challenges on three fronts:

**Research**: Significant progress has been achieved in the last few decades due to a large extent to the tremendous technological development. However, much of the knowledge gap that we identified still persists. This includes, among others, the parameterization of subgrid-scale processes in numerical models and many other processes previously unknown (or ignored for simplicity) that now appear to be much more important than we had previously anticipated, especially chemical and biological processes in the climate system.

**Education**: Higher education relatively high cost has generated a negative political climate. The development of on-line education, while offering great opportunities for students at competitive price, could undermine the financial system currently in place, which supports faculty salaries. Given the close relation between our teaching and research missions especially at research universities, the loss of revenues could have a significant indirect impact on our research productivity.

**Funding**: Our research and education capability is limited by the support that federal and state agencies provide to our scientific community. The recent sequester illustrates the freezing impact that reduced support from these agencies cause to our programs and we need to figure out how to adapt to such loss of resources. Philanthropy and joint ventures with corporations will probably become gradually more important in the future and developing a UCAR strategy for such a partnership is probably key to our future, while continuing advocating with the federal and state agencies about the importance of our programs.