

K.003 Earth Observations & Modeling for Decision Making.

Presenting Author:

David Fahey, NOAA ESRL, david.w.fahey@noaa.gov

Abstract:

Earth's growing population and increasing climate forcing are leading us to a new regime of impacts that pose unique challenges to society. A key challenge is understanding our environment (namely, the atmosphere and ecosystems) sufficiently well that we can describe the processes that define its present state and project how it might change in the future. Many attending this IGAC meeting are motivated by this need for understanding and have devoted themselves in significant ways. In this new regime, society is faced with new and complex decisions regarding our relation to our environment. As atmospheric and environmental scientists, we increase our effectiveness by being aware of how our environmental research connects to decisions. The best decisions require the fundamental understanding that we are continually seeking, and require us to frame and describe it in a manner relevant for the problems at hand and, above all, to communicate it effectively to stakeholders and decision makers. In this keynote, I will present a few examples from my experience that emphasize this perspective as a way of increasing awareness and providing encouragement for the challenges ahead.