

Will Weather Change Forever: Anticipating Meteorology in 2040 - DRAFT

AMS 2015 Annual Meeting Presidential Forum

Twenty five years hence, meteorology will be much different. Personal sensors will monitor weather nearly everywhere. Advanced computing will allow us to forecast at perhaps minute scales and kilometer resolutions, customized for each particular user. Post-mobile devices will enable instantaneous use of the information – even in remote areas of today’s developing nations. Transportation will be safer, businesses will operate more efficiently, events will automatically schedule around anticipated weather, and much more. Many aspects of our daily lives will change forever. Climate change’s possibilities add a critical dimension. Should global weather patterns be altered, forecasting could become more challenging than today. The release of the next IPCC report just prior to the 2015 annual meeting will bring focus to this particular issue.

Anticipating the future is as much art as science. But this future is now being built – through the groundwork laid by those now near the end of their careers, by today’s young professionals who will become 2040’s retirees, and by current students who will be our profession’s leaders.

The Forum will explore a variety of topics:

- Where will advances in the science and technology take us?
- Will our lives be better, safer, and healthier?
- Will the changes advance developing world prosperity and help the global economy?
- What new uses will people find for weather information?
- Will climate change alter global weather patterns? How will all environmental forecasting change?
- Could actions such as geoengineering create additional challenges for meteorologists?
- What role will meteorologists play in twenty five years?

Three speakers will represent the key demographic groups for whom meteorology in 2040 will be important:

- A well-known futurist or technology visionary from outside the field
- An early career professional, selected via an open prize competition for best idea
- A student, selected from among current AMS scholarship and fellowship recipients

Each will present their vision for 2040 followed by a roundtable discussion among the three presenters.