AMS RELEASES NEW STATEMENT ON FLASH FLOODING

April 20, 2017—Boston, MA—The American Meteorological Society issued a new statement today advising on the role of science and communication in reducing loss of life in flash flooding situations. Accurate modeling and forecasting of flash floods combined with effective communication of warnings to the public offer the best hope for mitigating this perennial hazard.

Scientific, technological, and operational advances have dramatically improved monitoring and prediction of heavy rainfall events that can lead to flash floods. Nevertheless, flash flooding continues to cause nearly 100 deaths per year in the United States and more than 5,000 globally. As a result, flash flooding remains one of the deadliest weather-related hazards in the world despite decades of advances in observing systems.

More and more, both research and observations indicate increases in high-intensity rainfall and flooding in many parts of the world, in many cases exacerbated by climate change. Humans also continue to build and live in areas that are prone to flooding, which increases risks to life, property, society, and the economy.

“Flash floods continue to be a threat to populations throughout the world,” said Roger Wakimoto, AMS president-elect (acting president). “While we continue to make progress toward improving the forecast/warning system, we must strive to educate the public regarding the inherent risks associated with living in flood-prone regions.”

According to the new statement, “Accurate forecast of rainfall and flash flood potential must be matched with timely issuance of actionable flash flood warnings and response. Communication of the flash flood risk to emergency response authorities and the public must be concise and
location- and time-specific so that the risk is understood and action may be taken.”

Two new real-time systems from the National Oceanic and Atmospheric Administration (NOAA) are providing scientists with the latest data needed to accurately predict and understand floods and flash floods. The National Water Model and the Flooded Locations and Simulated Hydrographs (FLASH) both employ physics-based, dynamic, data-driven descriptions of existing conditions and future potential.

The statement also recommends stronger integration between social sciences, emergency managers, behavioral psychology, and understanding of human responses to warnings in an effort to find more effective ways of educating the public and communicating the risks associated with flooding and flash flood events.

The full statement can be read here:

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About AMS

Founded in 1919, AMS is the leading voice in promoting and advancing the atmospheric and related oceanic and hydrologic sciences. We are committed to supporting and strengthening the weather, water, and climate community to ensure society fully benefits from scientific education, research, and understanding.

Headquartered in Boston, with an office in Washington DC, AMS has more than 13,000 members, including researchers, scientists, broadcasters, educators, and other professionals, as well as students and weather enthusiasts. AMS publishes books, textbooks, and monographs as well as more than 2,000 articles annually across 11 peer-reviewed scientific journals. AMS set the standard for broadcast meteorologist certification in 1957, and today more than 1,500 broadcasters and consultants are AMS certified. Each year, AMS holds 8 to 12 specialty meetings and an Annual Meeting that draws more than 3,500 attendees. AMS helps inform policy makers of the latest scientific understanding and high-impact research, and promotes Earth Science literacy through initiatives for K–12 teachers and undergraduate institutions across the country.