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Abstract for Okinawa meeting

## **Superstorms and “Seasons of Superstorms”**

Since the early 1990s, it appears that there has been an increase in hydro-meteorological events labeled as “Super”. The first in a series of these took place in 1993 in North America, and it extended from northeastern Canada southward to the island nation of Cuba. The center of the storm was in the eastern United States. It was called “Superstorm 1993”. Since then there has been a set of such extreme events around the globe. For example, in 1999 SuperTyphoon Maemi made landfall in the southern part of the Korean peninsula causing considerable damage to the port of Busan , while in the same year SuperCyclone Orissa decimated the northeastern state of Orissa in India. In 2002 China witnessed what was labeled a Super Duststorm. And in 2007 SuperTyphoon Wipha lashed Okinawa and went on to make landfall near Shanghai, sparking a massive evacuation of at-risk locations.

A closer review of climate and weather events labeled as “Super” exposes the fact that they are labeled as ‘super’ for a variety of reasons, most often unstated reasons. There is also the possibility of the media playing a game called “follow the leader” in the sense that the word “Super” in one newspaper or Internet headline caters to the public’s interests in disaster stories; one a sensational headline appears, others in the media tend to follow. However, the reality is that many of these “superstorm” events had physical-science based characteristics that merited their label of “Super”. Research can help policy makers to determine whether an apparent increase in frequency and intensity of such super events are somehow linked to global warming of the earth’s atmosphere, i.e., climate change. In other words, are we to expect more super events in future decades as the global climate regime continues to heat up?

Even more ominous, however, than an increase in the number of single (one-off) event is the possibility, even foreseeability, of a season of Superstorms. In fact, such a season occurred in 2004 both in the western Pacific and in the tropical Atlantic and once again in the summer of 2005 in the tropical Atlantic and Gulf of Mexico. The big question is whether societies are even thinking about such a possibility let alone thinking about how to prepare to cope with the possibility of being confronted by “Seasons of Superstorms”.